

National Climatic Data Center

DATA DOCUMENTATION

FOR

DATASET 9679 (DSI-9679)

**Tropical Oceans and Global Atmosphere
TOGA**

February 4, 2004

National Climatic Data Center
151 Patton Ave.
Asheville, NC 28801-5001 USA

Table of Contents

Topic	Page Number
1. Abstract.....	3
2. Element Names and Definitions:	3
3. Start Date.....	3
4. Stop Date.....	3
5. Coverage.....	3
6. How to order data.....	3
7. Archiving Data Center.	4
8. Technical Contact.....	4
9. Known Uncorrected Problems.....	4
10. Quality Statement.....	4
11. Essential Companion Data Sets.....	4
12. References.....	4

1. **Abstract:** The TOGA Sea Surface Temperature dataset is a historical dataset archived at the National Climatic Data Center (NCDC). This dataset is a global monthly sea surface temperature analysis which uses real-time in situ (ship and buoy) and satellite data. The method combines the advantages of both types of data: the ground truth of in situ data and the improved coverage of satellite data. The technique also effectively eliminates most of the bias differences between the in situ and satellite data.

The analysis of the monthly mean global SST is on a 2-degree latitude-longitude grid for the 10-year TOGA period (1985-1994). Three analyses were produced by the U.S. National Meteorological Center (NMC): an in situ, a satellite, and a "blended" analysis.

The SST data used in the in situ analysis are obtained from the NMC archive of surface marine observations. These data consist of all ship and buoy observations.

The satellite analysis data can significantly improve the in situ analysis, especially in regions of sparse in situ data. When comparing these measurements with conventional observations, it is important to note that the initial satellite measurement is a "skin" temperature (i.e., the temperature of a surface layer of less than a millimeter), while the in situ observations are "bulk" temperatures (i.e., the temperature of a surface layer on the order of meters).

The blended analysis method "blends" the two types of observations by using the in situ analysis to define "benchmark" temperature values in regions of frequent in situ observations and the satellite analysis to define the shape of the field in regions with little or no in situ data.

2. **Element Names and Definitions:**

More information can be found here:

<http://www.ncdc.noaa.gov/oa/coare/catalog/data/toc.html>

3. **Start Date:** 19850101

4. **Stop Date:** 19941231

5. **Coverage:**

- a. Southernmost Latitude: -90.0S
- b. Northernmost Latitude: 90.0N
- c. Westernmost Longitude: -180.0W
- d. Easternmost Longitude: 180.0E

6. **How to Order Data:**

Ask NCDC's Climate Services about the cost of obtaining this data set.

Phone: 828-271-4800

FAX: 828-271-4876

E-mail: NCDC.Orders@noaa.gov

:
:
:

7. **Archiving Data Center:**

Archive Branch
National Climatic Data Center
151 Patton Avenue
Asheville, NC 28801

8. **Technical Contact:**

National Climatic Data Center
151 Patton Avenue
Asheville, NC 28801

9. **Known Uncorrected Problems:** None.

10. **Quality Statement:**

11. **Essential Companion Datasets:**

12. **References:**